

Permitting History of Dense Pack and Overfire Air at IGS

Dense Pack

The Dense Pack Uprate Project avoided PSD permitting through the use of the WEPCO Rule's baseline actuals to future projected actuals provisions. Avoiding PSD relieved IPSC of the costly and timely requirements of full impact modeling, BACT, and delays. However, utilization of actuals to future actuals imposes a pseudo limit of the baseline plus major trigger (40 tons in the case of NO_x and SO₂). IPSC must provide data each year for some time to demonstrate the project did not contribute to significant emissions.

OverFire Air

Installation and use of the overfire air system causes CO emissions to increase in major amounts (greater than 100 tons per year). So the use of WEPCO's actual to future actuals test is not available to avoid PSD. However, another provision under the WEPCO rules allows that an environmentally beneficial pollution control project can avoid PSD. If a control technology is listed specifically in the rule, it is automatically considered environmentally beneficial. An example is low NO_x burner technology. If a control device is not specifically listed, then it must be proven to be environmentally beneficial on a case-by-case basis. Alternatively, the facility could just go through PSD for CO.

IPSC took the pollution control project (PCP) approach in our NOI to install overfire air at IGS. In doing so, we were attempting to avoid the consequences of PSD permitting; namely, time delays, full impact modeling, BACT, and permit limits. The inclusion of new permit conditions in an approval order would have to be rolled into our Title V permit prior to operation of the OFA system. Since our Title V was in limbo due to the renewal process, IPSC wanted to avoid the possibility of new permit conditions and utilized the tools allowed by law to do just that.

The idea of PCP to avoid PSD was new not only to the Utah Division of Air Quality, but also to EPA Region VIII. Allowing major increases in emissions without permit conditions is against their nature, and this made the permitting process problematic. With the use of screen modeling, and eventually agreeing to certain terms that the DAQ indicated were absolutely required, they agreed to accept the PCP as environmentally beneficial and we could avoid PSD. However, under the Utah State Administrative Rules that cover minor source permitting, which is what the PCP was now under, still requires permit conditions according to DAQ.

DAQ Position

The DAQ believes that to avoid PSD in using PCP provisions, IPSC must show that the PCP is environmentally beneficial on an ongoing basis. To do so, they are requiring a permit condition to monitor that the PCP is operated under Good Combustion Practices (GCP). In effect, this is a requirement to monitor CO and compare it to operating parameters to make sure it is in the range of PCP. The net affect of this is that until the new permit condition is inserted into our Title V, the OFA could be installed but not be operated.

Additionally, DAQ is taking the stance that since OFA can cause CO to increase in major amounts, and since IPSC must still meet the WEPCO actuals to future actuals test for the dense pack, we must have some way to determine that of the 2000 to 3000 ton increase in CO, only 99 tons or less are due to dense pack. When we provided methodology that could show this, they then indicated that we must do the same for NOx. That is, we must show that the dense pack project has not caused a significant increase, and we have to discount the effects of OFA. This is very problematic for us since we do not want to continue to operate in the condition we have been to meet NOx. We feel that we could argue our way out of this, but we are up against the wall time wise.

Our Options

IPSC has negotiated with DAQ that since we do not know the net effect of OFA both to NOx and to CO, an AO can not be reasonably constructed. Therefore, we are in the process of obtaining an emergency demonstration permit to allow IPSC to install and operate an OFA system for purposes of testing. This allows IPSC to construct, but does not allow IPSC to operate OFA on an ongoing basis. After testing, the OFA must be isolated until permitting for the continuous operation of OFA is complete.

Further, IPSC is also discussing with DAQ the possibility of permitting CO under PSD provisions, which at this point would require certain additional formalities to be completed. These include notifications to affected federal land managers, which could be part of the public comment period. Additionally, it would mean specific emission rate limits for CO would be put into our permits. This would take the WEPCO actuals to future actuals test out of the picture for CO. Whether that will also be true for NOx has yet to be worked out.

Bottom-Line on Where We Stand

It appears that IPSC will receive a experimental and testing (not to be confused with the permanent permit) permit to install OFA in time for this Spring outage. But is also means that it is very likely that the OFA system will be unusable for the summer season. The full-blown permanent approval order must still be negotiated after OFA testing using the data collected from that testing. And then, after both public comment and EPA review, the AO conditions must be rolled into our Title V. This process could take several months to conclude. Once this is complete, and since the AO and Title V cover both units, we should be set for Unit 2 next year with no foreseeable problems, permitting-wise.